

Understanding Your Annual Performance Report (APR)

District Name: ANY DISTRICT
County/District Code: 000-999

Points Earned: (See Scoring Guide)

H=High AH=High Average Y=Yearly Increase A=Average R=Rolling Average C=Combined Standard

MA=Math CA=Communication Arts SC=Science SS=Social Studies #=Level Not Determined +Floor Exceeded bpts=Bonus Points *Additional Data Required

Standard	Indicator	Topic	Scoring Guide Points Possible	Scoring Guide Points Required	Scoring Guide Points Earned	Performance Standard Met	Overall Points	
9.1	*1	MAP Index Grade 3-5	16	8	TOTAL=13 MA-Y=3 CA-A=3 SC-A=3 SS-R=4 bpts=0	Met	9	
	*2	MAP Index Grade 6-8	16	8	TOTAL=8 MA-A=3 CA-H=0 SC-Y=1 SS-H=4 bpts=0	Met	9	
	*3	MAP Index Grade 9-11	16	8	TOTAL=14 MA-Y=3 CA-R=4 SC-A=3 SS-H=4 bpts=0	Met	9	
9.2		Reading Index Grade 3	4	3	H=4 AH=4 Y=1	A=3 R=2	Met	9
		Reading Index Grade 7	4	3	H=0 AH=4 Y=0	A=0 R=0	Met	9
9.3		ACT	15	9	H=0 Y=6	A=9 R=10	Met	9
9.4	*1	Advanced Courses	15	9	H=12 AH=0 Y=6	R=10 C=Y	Met	7
	*2	Voc. Courses	15	9	H=0 AH=0 Y=3	R=0 C=Y	Met	7
	*3	College Placement	15	9	H=0 AH=0 Y=6	R=5 C=N	Not Met	0
	*4	Voc. Placement	15	9	H=0 AH=12 Y=6	R=5 C=N	Met	7
10.1	*1	Dropout	15	9	H=12 Y=3	A=9 R=5	Met	9
		GED - Bonus points on Dropout Rubric	-2 Points on 10.1*1 +3 Points on 10.1*1		0			
	*2	Attendance	15	9	H=0 Y=0	A=9 R=0	Met	9
					District Overall Points	93		

The above indicates the district's status in meeting the Performance Indicators as of October 1, 2004. These may be used in planning for school improvement, but they will be used to make MSIP accreditation decisions only for those districts being reviewed in 2004-2005 and for Re-review purposes. (See attachments for actual data.)

A guide to the sources and calculations used in developing your APR 2005-2006 VERSION 3

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MSIP PERFORMANCE SCORING MATRIX FOR 2004-2005

Standard	Indicator	Topic*	Scoring Guide Points Possible**	Scoring Guide Points Required***	Overall Accreditation Points (if Met)
9.1	*1	Index Approach MAP Grades 3-5	16 12 8	8 6 4	9
		Percentage Improvement Approach MAP Grades 3-5	32 24 16	16 12 8	
		Index Approach MAP Grades 6-8	16 12 8	8 6 4	
		Percentage Improvement Approach MAP Grades 6-8	32 24 16	16 12 8	
	*2	Index Approach MAP Grades 9-11	16 12 8	8 6 4	9
		Percentage Improvement Approach MAP Grades 9-11	32 24 16	16 12 8	
		Index Approach MAP Grades 3-5	16 12 8	8 6 4	
		Percentage Improvement Approach MAP Grades 3-5	32 24 16	16 12 8	
	*3	Index Approach MAP Grades 6-8	16 12 8	8 6 4	9
		Percentage Improvement Approach MAP Grades 6-8	32 24 16	16 12 8	
		Index Approach MAP Grades 9-11	16 12 8	8 6 4	
		Percentage Improvement Approach MAP Grades 9-11	32 24 16	16 12 8	
9.2	*1	Index Approach Reading Grade 3	4	3	9
		Percentage Improvement Approach Reading Grade 3	4	3	
	*2	Index Approach Reading Grade 7	4	3	9
		Percentage Improvement Approach Reading Grade 7	4	3	
9.3		ACT	15	9	9
9.4	*1	Advanced Courses	15	9	7
	*2	Vocational Courses	15	9	7
	*3	College Placement	15	9	7
	*4	Voc. Placement	15	9	7
10.1	*1	Dropout	15	9	9
	*2	Attendance	15	9	9

Topic

* The index approach is used for MAP standards to calculate points within a grade span. If a district fails to meet the standard for a grade span using the index approach, the percentage improvement approach is then used. If a district does not meet the standard for a grade span using either approach, scoring results are reported using the index approach.

Scoring Guide Points Possible

** The points possible for the grade spans included in Standard 9.1 are determined by the number of subject area tests administered (2, 3, or 4) and by the scoring approach used (index or percentage improvement).

Scoring Guide Points Required

*** The points required for the grade spans included in Standard 9.1 are determined by the number of subject area tests administered (2, 3, or 4) and by the scoring approach used (index or percentage improvement).

Standard 9.1

Indicators 1, 2, and 3 (MAP)

Source of data used in calculation: Data are obtained from CTB McGraw-Hill, which is the contracted, testing publisher for the Missouri Assessment Program. This CTB data file is used to create online reports for district use.

Notes:

- *For 2005 APRs, data from the past five years are used in the MSIP scoring guidelines for math, communication arts, science, and social studies.*
- *If the MAP testing schedule is reconfigured, the MAP scoring guidelines may be redesigned to maintain the continuity of MAP measurement for MSIP purposes.*
- *All MAP performance data are reported to the nearest tenth.*
- *MAP data for K-8 districts include only two grade spans (3-5 and 6-8).*

Two approaches are used to analyze improvement in MAP performance: the index approach and the percentage improvement approach. The index approach calculates the movement of students throughout all five MAP levels (Step I, Progressing, Nearing Proficient, Proficient, and Advanced). The percentage improvement approach calculates movement of students out of the bottom two levels and into the top two levels of the MAP. Data for each approach are analyzed and displayed by grade span (3-5, 6-8, and 9-11) using the five scoring guide methods outlined for each approach (high, average high, yearly increase, multiple-year over the base year, and rolling average). A grade span may be met using only one approach; however, each content/subject area may earn points using a different scoring guide method (high, average high, yearly increase, multiple-year average over the base year, and rolling average.). The same scoring guide method must be used for both the top two levels and the bottom levels whenever the percentage improvement approach is used.

During the 2002-2003 and 2003-2004 school years, social studies and science assessments were not state-funded. Districts were allowed to choose whether or not to use local funds to administer one or both of these assessments. **If a district that participated in one or both of these voluntary subjects in 2005 does not meet a standard using voluntary data, the standard is evaluated using only math and communication arts results.** Scoring procedures are not applied to science or social studies without the 2005 data. Districts that did not participate in all four assessments are considered “Met” on the MAP standards for a grade span if they receive half of the possible points. In other words, districts participating in assessments of three subject areas can meet the MAP standard for a grade span by earning 6 out of 12 points using the index approach or 12 out of 24 points using the percentage improvement approach. Districts participating in assessments of only two subject areas (or districts that do not meet the standard using voluntary subjects) can meet the MAP standard for a grade span using math and communication arts results by earning 4 out of 8 points using the index approach or 8 out of 16 points using the percentage improvement approach.

MAP Scoring Guidelines Using the Index Approach

For each subject in each grade span, MSIP uses the index approach to compare improvement on the MAP. The index approach is based on a composite of the performance of all students across all five MAP achievement levels. The assessment results in each subject tested for each year are converted to index points, and these index points are used to measure improvement from year to year. Index points are calculated by first multiplying the percent of students scoring at each achievement level for each subject and each year by the following values: Advanced by 3, Proficient by 2.5, Nearing Proficient by 2, Progressing by 1.5, and Step 1 by 1. These products are then summed to produce the index. (See Appendix Subsection A1 for further explanation and an example of how the index is calculated.) The index scoring guide methods are then applied to each subject in each grade span. The method awarding the maximum total points is used for each subject area, and the grade span is

considered “Met” if at least half of the possible points are earned. The following tables explain each of the index methods that are applied to assessment results:

High (H)		Points
Math	Using 5 years of data, 4 points if in 4 of 5 years the index is equal to or greater than 220 in grades 3-5, 181 in grades 6-8, and 168 in grades 9-11.	4
Communication Arts	Using 5 years of data, 4 points if in 4 of 5 years the index is equal to or greater than 211 in grades 3-5, 205 in grades 6-8, and 195 in grades 9-11.	4
Science	Using 5 years of data, 4 points if in 4 of 5 years the index is equal to or greater than 225 in grades 3-5, 183 in grades 6-8, and 179 in grades 9-11.	4
Social Studies	Using 5 years of data, 4 points if in 4 of 5 years the index is equal to or greater than 211 in grades 3-5, 217 in grades 6-8, and 185 in grades 9-11.	4

Average High (AH)		Points
Math	Using 5 years of data, 4 points if the average index for all years is equal to or greater than 220 in grades 3-5, 181 in grades 6-8, and 168 in grades 9-11.	4
Communication Arts	Using 5 years of data, 4 points if the average index for all years is equal to or greater than 211 in grades 3-5, 205 in grades 6-8, and 195 in grades 9-11.	4
Science	Using 5 years of data, 4 points if the average index for all years is equal to or greater than 225 in grades 3-5, 183 in grades 6-8, and 179 in grades 9-11.	4
Social Studies	Using 5 years of data, 4 points if the average index for all years is equal to or greater than 211 in grades 3-5, 217 in grades 6-8, and 185 in grades 9-11.	4

Yearly Increase (Y)		Points
Math Communication Arts Science Social Studies	Using 5 years of data, 1 point for each yearly increase of 2 or more index points.	4

Multiple-Year Average Over the Base Year (A)		Points
Math Communication Arts Science Social Studies	Using 5 years of data, 3 points if the four-year average (years 2, 3, 4, and 5) increases 6 index points or more over the base year and no more than one score in the four averaged years falls below the base year.	3

Rolling Average (R) – see next page for explanation/calculation		Points
Math Communication Arts Science Social Studies	Using 5 years of data, 1 point for each increase of 2 or more index points in the rolling average.	3

Level Not Determined (LND): This is the percent of students for which the district is accountable that do not receive a valid MAP score in a subject area. Students who take MAP-A are included in the LND for years 2001-2003, however for years 2004-2005 MAP-A students with a scorable MAP-A portfolio in a grade level tested on the MAP will be assigned an achievement level. No points are awarded in a subject area/grade span if the average LND in that subject area over the years analyzed exceeds 10%. If the LND in one or more years exceeds 14%, the average LND must be 10% or less **and** the LND in the final year of analysis must be 6% or less in order to earn scoring guide points. If a subject area is not scored due to the LND percentage, the # symbol appears next to the subject area on the APR summary sheet. Scores for LEP students who have been in the United States three years or less are disaggregated from the LND if the district selects “LEP first through third year in the U.S.A.” on the student information sheets. (See Appendix Subsection A2 for an explanation and example of the LND calculation.)

Rolling Average: The rolling average is years 1 and 2 averaged, years 2 and 3 averaged, years 3 and 4 averaged, and years 4 and 5 averaged; these averages are then used for comparison.

Example:

4 th Grade Math	Year 1	Year 2	Year 3	Year 4	Year 5
Index Score	195.6	192.1	196.8	209.6	213.9

For the above scores, the rolling average would be calculated as follows:

- **STEP 1** – Add the score for each year to the score for the following year.
 - Years 1 and 2:** $195.6 + 192.1 = 387.7$
 - Years 2 and 3:** $192.1 + 196.8 = 388.9$
 - Years 3 and 4:** $196.8 + 209.6 = 406.4$
 - Years 4 and 5:** $209.6 + 213.9 = 423.5$
- **STEP 2** – Divide each of the preceding sums by 2 to determine the two-year average.
 - Years 1 and 2:** $387.7 \div 2 = 193.85$
 - Years 2 and 3:** $388.9 \div 2 = 194.45$
 - Years 3 and 4:** $406.4 \div 2 = 203.2$
 - Years 4 and 5:** $423.5 \div 2 = 211.75$
- **STEP 3** – Compare the two-year averages to determine the number of scoring points earned using the rolling average method.

4 th Grade Math	Yr 1-Yr 2 Average	Yr 2-Yr 3 Average	Yr 3-Yr 4 Average	Yr 4-Yr 5 Average
Two-Year Average	193.85	194.45	203.2	211.75

For math, a district earns 1 point for each increase of 2 index points or more on the rolling average. In this example, the index score increases by .6 from the first to the second comparison, by 8.75 from the second to the third comparison, and by 8.55 from the third to the fourth comparison. A district with these scores would earn 2 points using the rolling average method.

Index Floor (+): The + symbol on the APR summary chart indicates that the index score in the final year of analysis is below the established floor. Half-point values may be earned if the district improves the required points using any of the five scoring guide methods **and** shows progress equal to or greater than the state average increase from year one through the final year used for analysis (see Appendix Subsection A3 for the calculation used for comparison of state and district average improvement).

Full scoring guide points are not awarded in a subject if the index score on the last year tested falls below the following floor levels:

Mathematics:	Communication Arts:	Science:	Social Studies:
Grade 4 -- 190	Grade 3 -- 179	Grade 3 -- 191	Grade 4 -- 177
Grade 8 -- 148	Grade 7 -- 171	Grade 7 -- 152	Grade 8 -- 180
Grade 10 -- 140	Grade 11 -- 163	Grade 10 -- 156	Grade 11 -- 155

MAP Bonus Points:

Districts that have 20 or more students in an ethnic/racial minority in a grade tested may earn MAP bonus points if the improvement of the minority group(s) is greater than or equal to the improvement of the majority group in more than half of the years of comparison. Bonus points are awarded based only on the approach (index or percentage improvement) for which the district receives overall scoring guide points. See Appendix Subsection A5 for an explanation of the bonus point calculation using the index approach.

MAP Scoring Guidelines Using the Percentage Improvement Approach

If a district fails to meet a grade span using any of the five methods included in the index approach, the following methods of the percentage improvement approach are applied to each subject in each grade span. The percentage improvement approach is used to analyze the percent of students in the bottom two MAP levels (Step 1 and Progressing) and the top two MAP levels (Proficient and Advanced). The method awarding the maximum total points for the bottom two and the top two levels for each grade span is used, and the grade span is considered “Met” if at least half of the possible points are earned. The following tables explain each of the percentage improvement methods that are applied to assessment results:

High (H)		Points
<i>Upper two levels for each subject</i>		
Math Communication Arts Science Social Studies	Using 5 years of data, 4 points if for 4 of 5 years the percent of students in the top two levels is equal to or greater than 50%.	4
<i>Bottom two levels for each subject</i>		
Math Communication Arts Science Social Studies	Using 5 years of data, 4 points if for 4 of 5 years the percent of students in the bottom two levels is equal to or less than 5%.	4

Average High (AH)		Points
<i>Upper two levels for each subject</i>		
Math Communication Arts Science Social Studies	Using 5 years of data, 4 points if the average percent of students in the top two levels for all years is equal to or greater than 50%.	4
<i>Bottom two levels for each subject</i>		
Math Communication Arts Science Social Studies	Using 5 years of data, 4 points if the percent of students in the bottom two levels for all years is equal to or less than 5%.	4

Yearly Increase (Y)		Points
<i>Upper two levels for each subject</i>		
Math Communication Arts Science Social Studies	Using 5 years of data, 1 point for each 3% or more yearly increase in the percent of students in the top two levels.	4
<i>Bottom two levels for each subject</i>		
Math Communication Arts Science Social Studies	Using 5 years of data, 1 point for each 3% yearly decrease in the percent of students in the bottom two levels.	4

Multiple-Year Average Over the Base Year (A)		Points
<i>Upper two levels for each subject</i>		
Math Communication Arts Science Social Studies	Using 5 years of data, 3 points for an increase of 7% or more in the four-year average (years 2, 3, 4, and 5) of the percent of students in the top two levels over the base year, and no more than 1 score in the four averaged years falls below the base year.	3
<i>Bottom two levels for each subject</i>		
Math Communication Arts Science Social Studies	Using 5 years of data, 3 points for a decrease of 7% or more in the four-year average (years 2, 3, 4, and 5) of the percent of students in the bottom two under the base year, and no more than 1 score in the four averaged years falls above the base year.	3

Rolling Average (R) – see next page for explanation/calculation		Points
<i>Upper two levels for each subject</i>		
Math Communication Arts Science Social Studies	Using 5 years of data, 1 point for each 3% or more increase in the top two levels in the rolling average.	3
<i>Bottom two levels for each subject</i>		
Math Communication Arts Science Social Studies	Using 5 years of data, 1 point for each 3% or more decrease in the bottom two levels in the rolling average.	3

Level Not Determined (LND): This is the percent of students for which the district is accountable that do not receive a valid MAP score in a subject area. Students who take the MAP-A are included in the LND for years 2001-2003, however for years 2004-2005 MAP-A students with a scorable MAP-A portfolio in a grade level tested on the MAP will be assigned an achievement level. No points are awarded in a subject area/grade span if the average LND in that subject area over the years analyzed exceeds 10%. If the LND in one or more years exceeds 14%, the average LND must be 10% or less **and** the LND in the final year of analysis must be 6% or less in order to earn scoring guide points. If a subject area is not scored due to the LND percentage, the # symbol appears next to the subject area on the APR summary sheet. Scores for ELL students who have been in the United States three years or less are disaggregated from the LND if the district selects “ELL first through third year in the U.S.A.” or “ELL in United States less than a year” on the student information sheets. (See Appendix Subsection A2 for an explanation and example of the LND calculation.)

Rolling Average: The rolling average is years 1 and 2 averaged, years 2 and 3 averaged, years 3 and 4 averaged, and years 4 and 5 averaged; these averages are then used for the comparison.

Example:

Math	Year 1	Year 2	Year 3	Year 4	Year 5
Advanced and Proficient	25.6%	23.9%	27.4%	28.2%	33.1%
Step 1 and Progressing	48.3%	51.9%	50.1%	44.9%	43.8%

For the above scores, the rolling average would be calculated as follows:

- **STEP 1** – Add the percentage of students in Advanced and Proficient for each year to the percentage of students in Advanced and Proficient for the following year.
 - Years 1 and 2:** $25.6 + 23.9 = 49.5$
 - Years 2 and 3:** $23.9 + 27.4 = 51.3$
 - Years 3 and 4:** $27.4 + 28.2 = 55.6$
 - Years 4 and 5:** $28.2 + 33.1 = 61.3$
- **STEP 2** – Divide each of the preceding sums by 2 to determine the two-year average.
 - Years 1 and 2:** $49.5 \div 2 = 24.75$
 - Years 2 and 3:** $51.3 \div 2 = 25.65$
 - Years 3 and 4:** $55.6 \div 2 = 27.8$
 - Years 4 and 5:** $61.3 \div 2 = 30.65$
- **STEP 3** – Add the percentage of students in Step 1 and Progressing for each year to the percentage of students in Step 1 and Progressing for the following year.
 - Years 1 and 2:** $48.3 + 51.9 = 100.2$
 - Years 2 and 3:** $51.9 + 50.1 = 102.0$
 - Years 3 and 4:** $50.1 + 44.9 = 95.0$
 - Years 4 and 5:** $44.9 + 43.8 = 88.7$
- **STEP 4** – Divide each of the preceding sums by 2 to determine the two-year average.
 - Years 1 and 2:** $100.2 \div 2 = 50.1$
 - Years 2 and 3:** $102 \div 2 = 51.0$
 - Years 3 and 4:** $95 \div 2 = 47.5$
 - Years 4 and 5:** $88.7 \div 2 = 44.35$

- **STEP 5** -- Compare the two-year averages to determine the number of scoring points earned using the rolling average method.

Math	Yr 1-Yr 2 Average	Yr 2-Yr 3 Average	Yr 3-Yr 4 Average	Yr 4-Yr 5 Average
Advanced and Proficient	24.75	25.65	27.8	30.65
Step 1 and Progressing	50.1	51.0	47.5	44.35

For math, a district earns 1 point for each 3% or more increase in Advanced and Proficient and each 3% or more decrease in Step 1 and Progressing using the rolling average. In this example, the percentage in Advanced and Proficient increases by .9 from the first to the second comparison, by 2.15 from the second to the third comparison, and by 2.85 from the third to the fourth comparison. The percentage in Step 1 and Progressing does not decrease from the first to the second comparison, then decreases by 3.5 from the second to the third comparison, and decreases by 3.15 from the third to the fourth comparison. A district with these scores would earn 2 points using the rolling average method.

Percentage Improvement Floor (+): The + symbol on the APR summary chart indicates that the percent of students scoring in Step 1 and Progressing in the final year of analysis is above the established floor for the percentage improvement approach. Full scoring guide points are not awarded in a subject if the percentage of students in Step 1 and Progressing on the last year tested is above (in other words, if the percentage is higher than) the floor levels listed below. Half-point values may be earned if the district improves the required percentage points using any of the five scoring guide methods **and** shows progress equal to or greater than the state average increase from year one through the final year used for analysis.

Mathematics:

Grade 4 -- 35%
Grade 8 -- 76%
Grade 10 -- 81%

Communication Arts:

Grade 3 -- 46%
Grade 7 -- 60%
Grade 11 -- 83%

Science:

Grade 3 -- 29%
Grade 7 -- 78%
Grade 10 -- 72%

Social Studies:

Grade 4 -- 49%
Grade 8 -- 45%
Grade 11 -- 61%

MAP Bonus Points:

Districts that have 20 or more students in an ethnic/racial minority in any grade tested may earn MAP bonus points if the improvement of the minority group is greater than or equal to the improvement of the majority group in more than half of the years of comparison. Comparisons between each minority group and the majority group are made using both the index and percentage improvement approaches; however, bonus points are awarded using only the approach for which the district earns scoring guide points in that grade span. See Appendix Subsection A5 for an explanation of the bonus point calculation using the percentage improvement method.

Standard 9.2

Indicators 1 and 2 (Reading, Grades 3 & 7)

Source of data used in calculation: Data are obtained from CTB McGraw-Hill, which is the contracted testing publisher for the Missouri Assessment Program. This CTB data file is used to create online reports for district use.

Two approaches are used to analyze improvement in reading performance: the index approach and the percentage improvement approach. The index approach calculates the movement of students throughout three reading levels (Unsatisfactory, Satisfactory, and Proficient). The percentage improvement approach evaluates the percentage of students scoring at the Proficient level. Data for each approach are displayed and analyzed by grade (3 and 7) using the five scoring guide methods outlined for each approach (High, Average High, Yearly Increase, Multiple-Year Average Over the Base Year, and Rolling Average).

Reading Scoring Guidelines Using the Index Approach (A district is considered “Met” at each grade with 3 points.)

The index is calculated based on three reading levels (Unsatisfactory, Satisfactory, and Proficient). The percent of students scoring at each of these achievement levels is multiplied by the following values: Proficient by 3, Satisfactory by 2, and Unsatisfactory by 1. These products are summed to produce the index for grades 3 and 7. (See Appendix Section B for further explanation and an example of how the index is calculated.) The index is then analyzed using the following methods:

Method	Description	Points
High (H):	Using 5 years of data, 4 points if in 4 of 5 years the index is equal to or greater than 222 in grade 3 and 210 in grade 7.	4
Average High (AH):	Using 5 years of data, 4 points if the average index is equal to or greater than 222 in grade 3 and 210 in grade 7.	4
Yearly Increase (Y):	Using 5 years of data, 1 point for each yearly increase of 2 or more index points.	4
Multiple-Year Average Over the Base Year (A):	Using 5 years of data, 3 points if the four-year average (years 2, 3, 4, and 5) increases 6 index points or more over the base year and no more than one score in the four averaged years falls below the base year.	3
Rolling Average (R)*:	Using 5 years of data, 1 point for each increase of 2 or more index points in the rolling average.	3

Index Floor: The + symbol on the APR summary chart indicates that the reading index score in the final year of analysis and at least one of the two preceding years is below the established floor. In other words, for the 2005 APR any district with index scores that fall below the reading floor in both 2005 and 2004, or 2005 and 2003, receives a + symbol on the APR summary chart. No scoring guide points are awarded at a grade level if the reading index scores on the last year tested and at least one of the preceding two years falls below the following floor levels:

3rd Grade – 173
7th Grade – 162

Level Not Determined (LND): This is the percent of students for which the district is accountable that do not receive a valid MAP score in a subject area. Students who take the MAP-A are included in the LND for years 2001-2003, however for years 2004-2005 MAP-A students with a scorable MAP-A portfolio in a grade level

tested on the MAP will be assigned an achievement level. No points are awarded in a subject area/grade span if the average LND in that subject area over the years analyzed exceeds 10%. If the LND in one or more years exceeds 14%, the average LND must be 10% or less **and** the LND in the final year of analysis must be 6% or less in order to earn scoring guide points. If a subject area is not scored due to the LND percentage, the # symbol appears next to the subject area on the APR summary sheet. Scores for ELL students who have been in the United States three years or less are disaggregated from the LND if the district selects “ELL first through third year in the U.S.A.” or “ELL in United States less than a year” on the student information sheets. (See Appendix Subsection A2 for an explanation and example of the LND calculation.) The Communication Arts LND is used for Reading calculations.

Reading Scoring Guidelines Using the Percentage Improvement Approach.
(A district is considered “Met” at each grade with 3 points.)

If a district fails to meet a reading grade level using the index approach, the following methods of the percentage improvement approach are applied. The method yielding the highest number of points is used. A grade is considered “Met” if 3 or more points are earned.

Method	Description	Points
High (H):	Using 5 years of data, 4 points if in 4 of 5 years 50% or more of the students score at the proficient level on the MAP.	4
Average High (AH):	Using 5 years of data, 4 points if an average of 50% or more of the students score at the proficient level on the MAP.	4
Yearly Increase (Y):	Using 5 years of data, 1 point for each 2% or more yearly increase in the percent of students scoring at the proficient level on the MAP.	4
Multiple-Year Average Over the Base Year (A):	Using 5 years of data, 3 points for an increase of 4% or more in the percent of students scoring at the proficient level in the four-year average (years 2, 3, 4, and 5) over the base year, and no more than 1 score in the four averaged years falls below the base year.	3
Rolling Average (R)*:	Using 5 years of data, 1 point for each 2% increase or more in the percent of students scoring at the proficient level on the MAP as measured by the rolling average.	3

*See page 4 for an explanation of the procedures used to calculate the rolling average.

Percentage Improvement Floor: The + symbol on the APR summary chart indicates that the percent of students scoring at the Proficient level in the final year of analysis and at least one of the two preceding years is below the established floor for the percentage improvement approach. In other words, for the 2005 APR any district whose percent of students scoring Proficient falls below the reading floor in both 2005 and 2004, or 2005 and 2003, receives a + symbol on the APR summary chart. No scoring guide points are awarded at a grade level if the percent of students scoring Proficient in the last year tested and at least one of the preceding two years falls below the following floor levels:

3rd Grade – 15%
7th Grade – 17%

Level Not Determined (LND): This is the percent of students for which the district is accountable that do not receive a valid MAP score in a subject area. Students who take the MAP-A are included in the LND for years 2001-2003, however for years 2004-2005 MAP-A students with a scorable MAP-A portfolio in a grade level tested on the MAP will be assigned an achievement level. No points are awarded in a subject area/grade span if the average LND in that subject area over the years analyzed exceeds 10%. If the LND in one or more years

exceeds 14%, the average LND must be 10% or less **and** the LND in the final year of analysis must be 6% or less in order to earn scoring guide points. If a subject area is not scored due to the LND percentage, the # symbol appears next to the subject area on the APR summary sheet. Scores for ELL students who have been in the United States three years or less are disaggregated from the LND if the district selects “ELL first through third year in the U.S.A.” or “ELL in United States less than a year” on the student information sheets. (See Appendix Subsection A2 for an explanation and example of the LND calculation.) The Communication Arts LND is used for Reading calculations.

Standard 9.3

(ACT -- A district is considered “Met” with 9 points.)

Method	Description	Points
High (H):	12 points if in 4 of the last 5 years of data 31% or more of the graduates scored at or above the national average on the ACT.	12
Average (A):	9 points if during the last 5 years of data the percentage of graduates scoring at or above the national average on the ACT averaged at least 27%.	9
Yearly Increase (Y):	3 points for each of the last 5 years of data the percent of graduates scoring at or above the national average on the ACT increased from the previous year by at least 1%.	12
Rolling Average (R)*:	5 points for each of the last five years the rolling average increased by at least 1%.	15

*See page 4 for an explanation of the procedures used to calculate the rolling average.

Standard 9.4

Indicator 1 (Advanced Courses -- A district is considered “Met” with 9 points.)

Method	Description	Points
High (H):	12 points if in 4 of the last 5 years the percent of credits taken by juniors and seniors in approved advanced courses as reported in Core Data (screen 20) is 35% or higher.	12
Average High (AH):	12 points if the average percent of credits taken by juniors and seniors in approved advanced courses as reported in Core Data (screen 20) is 35% or higher.	12
Yearly Increase (Y):	3 points for each of the last 5 years that the percent of credits taken by juniors and seniors in approved advanced courses as reported in Core Data (screen 20) increases by 2% or more from the previous year.	12
Rolling Average (R)*:	5 points for each of the last 5 years the rolling average increases by 2% or more.	15
Combined (C)**:	If during 4 out of the last 5 years a district has 50% or more of the credits taken by juniors and seniors in Advanced Courses (9.4.1) and Vocational Courses (9.4.2) combined, then both standards will be considered “Met”.	

*See page 4 for an explanation of the procedures used to calculate the rolling average.

**See Appendix Subsection D3 for an explanation of the calculation used in the “combined” method.

Standard 9.4

Indicator 2 (Vocational Courses -- A district is considered “Met” with 9 points.)

Method	Description	Points
High (H):	12 points if during 4 of the last 5 years the percent of credits taken by juniors and seniors in approved vocational courses, as reported in Core Data (screen 20), is 25% or higher.	12

Average High (AH):	12 points if the average percent of credits taken by juniors and seniors in approved vocational courses, as reported in Core Data (screen 20), is 25% or higher.	12
Yearly Increase (Y):	3 points for each of the last 5 years the percent of credits taken by juniors and seniors in approved vocational courses, as reported in Core Data (screen 20), increases by 1% or more from the previous year.	12
Rolling Average (R)*:	5 points for each of the last 5 years the rolling average increases by 1% or more.	15
Combined (C)**:	If during 4 out of the last 5 years a district has 50% or more of the credits taken by juniors and seniors in Advanced Courses (9.4.1) and Vocational Courses (9.4.2) combined, then both standards will be considered “Met”.	

*See page 4 for an explanation of the procedures used to calculate the rolling average.

**See Appendix Subsection D3 for an explanation of the calculation used in the “combined” method.

Standard 9.4

Indicator 3 (College Placement -- A district is considered “Met” with 9 points.)

Method	Description	Points
High (H):	12 points if in 4 out of 5 years 60% or more of the graduates participate in postsecondary education at a community college, a four-year college/university, or technical school within six months of graduating.	12
Average High (AH):	12 points if an average of 60% or more of the graduates participate in postsecondary education at a community college, a four-year college/university, or technical school within six months of graduating.	12
Yearly Increase (Y):	3 points for each yearly increase of 1% or more in the percent of graduates who participate in postsecondary education at a community college, a four-year college/university, or technical school within six months of graduating.	12
Rolling Average (R)*:	5 points for each of the last 5 years the rolling average increases by 1% or more.	15
Combined (C)**:	If during 4 out of the last 5 years the combined percent of graduates placed in college (9.4.3), and vocational graduates who entered in the military, or were placed in a job related to their vocational training (9.4.4) is 85% or higher, then both standards will be considered “Met”.	

*See page 4 for an explanation of the procedures used to calculate the rolling average.

**See Appendix Subsection D6 for an explanation of the calculation used in the “combined” method.

Standard 9.4

Indicator 4 (Vocational Placement -- A district is considered “Met” with 9 points.)

Method	Description	Points
High (H):	12 points if during 4 of the last 5 years at least 70% of the graduates who completed a vocational program were successfully placed in occupations related to their vocational education program, continued their education or entered military service.	12
Average High (AH):	12 points if an average of 70% or more of the graduates who completed a vocational program were successfully placed in occupations related to their vocational education program, continued their education or entered military service.	12
Yearly Increase (Y):	3 points for each of the last 5 years that the percent of graduates who were successfully placed in occupations related to their training, continued their education or entered military service increased by 1% or more from the previous year.	12

Rolling Average (R)*:	5 points for each of the last 5 years the rolling average increased by 1% or more.	15
Combined (C)**:	If during 4 out of the last 5 years the combined percent of graduates placed in college (9.4.3), and vocational graduates who entered in the military, or were placed in a job related to their vocational training (9.4.4) is 85% or higher, then both standards will be considered “Met”.	

*See page 4 for an explanation of the procedures used to calculate the rolling average.

**See Appendix Subsection D6 for an explanation of the calculation used in the “combined” method.

Standard 10.1

Indicator 1 (Dropout -- A district is considered “Met” with 9 points.)

Method	Description	Points
High (H):	12 points if during 4 of the last 5 years the dropout rate reported in Core Data (screen 13) is 3% or below.	12
Yearly Increase (Y):	3 points for each year the dropout rate reported in Core Data (screen 13) decreases by .5% or more from the previous year during the past 5 years.	12
Average (A):	9 points if the average annual dropout rate for the past 5 years reported in Core Data (screen 13) is 4% or less and no more than 1 of the 5 years has an annual dropout rate above 5%.	9
Rolling Average (R)*:	5 points for each of the last 5 years the rolling average decreases by .5% or more.	15
Zero points will be given if the average of the annual dropout rates for the past 5 years is 10% or higher.		

*See page 4 for an explanation of the procedures used to calculate the rolling average.

GED Bonus Points: In the year of a district’s MSIP review, bonus points will be awarded or points will be deducted for this standard under the following conditions. Two points will be deducted from 10.1.1 if the district does not consistently report students who drop out of school to the Missouri Literacy Hotline, as required by Standard 8.3.5. One point will be added for each of the past five years in which at least 5% of the district’s five-year average number of seniors earned a GED within 5 years of dropping out of school.

Standard 10.1

Indicator 2 (Attendance -- A district is considered “Met” with 9 points.)

Method	Description	Points
High (H):	12 points if in 4 of the last 5 years the district ADA is 95% or higher and no level (K-8 or 9-12) is below 93%.	12
Yearly Increase (Y):	3 points for each year the district ADA increases from the previous year by at least .5% and no more than 1 year at a level (K-8 or 9-12) is below 90% during the past 5 years.	12
Average (A):	9 points if the district ADA is 92% or above for each of the past 5 years and the ADA for a level (K-8 or 9-12) is below 90% for no more than 1 of the past 5 years.	9
Rolling Average (R)*:	5 points for each year the rolling average increases by at least .5% and no more than 1 year at a level (K-8 or 9-12) is below 90% during the past 5 years.	15

*See page 4 for an explanation of the procedures used to calculate the rolling average.

Standard 11.1 (K-8 districts only)

(Post-Elementary School GPA, -- A district is considered “Met” with 8 points.

Method	Description	Points
High (H):	10 points if the grade point average (GPA) of ninth- and tenth-grade students from the K-8 district is equal to or higher than the GPA of students from the receiving district(s) for 4 of the past 5 years.	10
Yearly 5% (Y)	8 points if the yearly GPA of the sending district is no less than 95% of the receiving district’s GPA for 4 of the past 5 years.	8
Average 5% (A)	8 points if the sending district average GPA for the past 5 years combined is no less than 95% of the receiving district’s 5 year average GPA.	8
Rolling Average (R)*:	5 points for each year the rolling average of the sending district’s GPA increases by at least .1 with no more than one year below a 2.0.	15
Multiple Year Average Over the Base (M):	8 points if using 5 years of data, the four-year average (2, 3, 4, and 5) of the sending district’s GPA increases by .2 over the base year.	8

*See page 4 for an explanation of the procedures used to calculate the rolling average.

APPENDIX

Section A: Standard 9.1

Subsection A.1: MAP Index Calculation

The index is a single composite number that represents the performance of every student in all five MAP levels in a tested subject. To produce an index score, the percent of reportable students in each level in a tested subject is multiplied by the following values: Step 1 by a value of 1, Progressing by 1.5, Nearing Proficient by 2, Proficient by 2.5, and Advanced by 3. The sum of each of these products for each subject tested is the index for that subject. The index measures improvement from one year to the next for each subject. The scoring guide defines the required improvement in index score from one year to the next.

The following example shows how the index is calculated in a single subject and grade span:

- **STEP 1** – The percent of students in each performance level is determined for each year.

Level	Index Point Value	Year 1	Year 2	Year 3	Year 4	Year 5
Step 1	1.0	19.5%	20.2%	17.0%	16.9%	9.6%
Progressing	1.5	21.3%	20.5%	21.3%	14.0 %	20.0%
Nearing Proficient	2.0	27.0%	27.6%	28.0%	24.6%	25.4%
Proficient	2.5	12.9%	18.4%	18.5%	22.1%	23.0%
Advanced	3.0	19.3%	13.3%	15.2%	22.4%	22.0%

- **STEP 2** – The percentage of students in each performance level is multiplied by the index point value for each year.

Year 1	Year 2	Year 3	Year 4	Year 5
19.5 x 1.0 = 19.50	20.2 x 1.0 = 20.20	17.0 x 1.0 = 17.00	16.9 x 1.0 = 16.90	9.6 x 1.0 = 9.60
21.3 x 1.5 = 31.95	20.5 x 1.5 = 30.75	21.3 x 1.5 = 31.95	14.0 x 1.5 = 21.00	20.0 x 1.5 = 30.00
27.0 x 2.0 = 54.00	27.6 x 2.0 = 55.20	28.0 x 2.0 = 56.00	24.6 x 2.0 = 49.20	25.4 x 2.0 = 50.80
12.9 x 2.5 = 32.25	18.4 x 2.5 = 46.00	18.5 x 2.5 = 46.25	22.1 x 2.5 = 55.25	23.0 x 2.5 = 57.50
19.3 x 3.0 = 57.90	13.3 x 3.0 = 39.90	15.2 x 3.0 = 45.60	22.4 x 3.0 = 67.20	22.0 x 3.0 = 66.00
195.6 Index Points	192.1 Index Points	196.8 Index Points	209.6 Index Points	213.9 Index Points

- **STEP 3** - For scoring in each grade span, a grid is created and scoring guidelines are applied to the scores in the grid. An example appears in the grid below:

	Year 1	Year 2	Year 3	Year 4	Year 5
Grade 4 Math	195.6	192.1	196.8	209.6	213.9

Subsection A.2: Level Not Determined (LND) Calculation

Annual LND

- “Accountable Students” minus “Reportable Students” equals “LND Students”
- “LND Students” divided by “Accountable Students” equals “Annual Percent of Students in LND”

Average LND

- Sum of Annual Percent of Students in LND for all required years divided by the number of required years

Example:

	Year 1	Year 2	Year 3	Year 4	Year 5	Average LND
Accountable	50	45	52	60	50	
Reportable	45	40	49	58	49	
LND Students	5	5	3	2	1	
Percent of Students in LND	10.0%	11.1%	5.8%	3.3%	2.0%	6.4%

Subsection A.3: Floor Calculation for Comparison of State and District Average Improvement (Index Approach)

When a district fails to meet the requirements of the established floor in the last year of analysis, half-point values are earned if the district improves the required points using any of the five scoring guide methods **and** shows progress equal to or greater than the state average increase from year one through the final year used for analysis. Footnote: Floors represent the minimal level of performance necessary to earn full scoring guide points for improvement. The floors were established at one standard deviation below the state average. The following example illustrates how the comparison is made between state and district average improvement.

Example:

	Year 1	Year 2	Year 3	Year 4	Year 5
State Index Score	152.3	156.4	155.8	159.7	163.2
District Index Score	149.2	161.5	155.1	157.9	161.8

- **STEP 1** – Find the state yearly improvement by subtracting the index scores for years 1, 2, 3, and 4 from the subsequent year of each. (Years in which the index score decreases will be reflected by a negative number.)

Year 1 State Improvement	Year 2 Index Score minus Year 1 Index Score	$156.4 - 152.3 =$	4.1
Year 2 State Improvement	Year 3 Index Score minus Year 2 Index Score	$155.8 - 156.4 =$	-0.6
Year 3 State Improvement	Year 4 Index Score minus Year 3 Index Score	$159.7 - 155.8 =$	3.9
Year 4 State Improvement	Year 5 Index Score minus Year 4 Index Score	$163.2 - 159.7 =$	3.5
Sum of Yearly State Improvement			10.9

- **STEP 2** – To determine the average state improvement, divide the sum of the yearly state improvement by the number of years of data minus one

$$\text{Average state improvement} = 10.9 \div (5-1) = 2.725$$

- **STEP 3** – Find the district's yearly improvement by subtracting the index scores from years 1, 2, 3, and 4 from the subsequent year of each. (Years in which the index score decreases will be reflected by a negative number.)

Year 1 District Improvement	Year 2 Index Score minus Year 1 Index Score	$161.5 - 149.2 =$	12.3
Year 2 District Improvement	Year 3 Index Score minus Year 2 Index Score	$155.1 - 161.5 =$	-6.4
Year 3 District Improvement	Year 4 Index Score minus Year 3 Index Score	$157.9 - 155.1 =$	2.8
Year 4 District Improvement	Year 5 Index Score minus Year 4 Index Score	$161.8 - 157.9 =$	3.9
Sum of Yearly District Improvement			12.6

- **STEP 4** – To determine the average district improvement, divide the sum of the yearly district improvement by the number of years of data minus one

$$\text{Average district improvement} = 12.6 \div (5-1) = 3.15$$

- **STEP 5** – Compare the average state improvement to the average district improvement. If the average district improvement is equal to or greater than the average state improvement, the district is eligible to receive half-point values. In this example, the average district improvement (3.15) is higher than the average state improvement (2.725), so this district would be eligible to receive half-point values.

Subsection A.4: Floor Calculation for Comparison of State and District Average Improvement (Percent Improvement Approach)

When a district fails to meet the requirements of the established floor in the last year of analysis, half-point values are earned if the district improves the required points using any of the five scoring guide methods and shows progress equal to or greater than the state average increase from year one through the final year used for analysis. The following example illustrates how the comparison is made between state and district average improvement using the percent improvement approach. This calculation is used only when methods of the percent improvement approach are applied to the standard in which the district does not meet the floor requirements in the final year.

Example:

	Year 1	Year 2	Year 3	Year 4	Year 5
State Percent Scoring in Bottom Two Levels	28.9%	30.3%	27.2%	30.9%	30.4%
District Percent Scoring in Bottom Two Levels	54.7%	47.9%	44.1%	48.6%	52.1%

- **STEP 1** – Find the state yearly improvement by subtracting the percent scoring in the bottom two levels (Step 1 and Progressing) for years 2, 3, 4, and 5 from the previous year of each. (Years in which the percent scoring in the bottom two levels increases will be reflected by a negative number.)

Year 1 State Improvement	Year 1 % in bottom two minus Year 2 % in bottom two	$28.9\% - 30.3\% = -1.4\%$
Year 2 State Improvement	Year 2 % in bottom two minus Year 3 % in bottom two	$31.3\% - 27.2\% = 4.1\%$
Year 3 State Improvement	Year 3 % in bottom two minus Year 4 % in bottom two	$27.2\% - 30.9\% = -3.7\%$
Year 4 State Improvement	Year 4 % in bottom two minus Year 5 % in bottom two	$31.7\% - 30.4\% = 1.3\%$
Sum of Yearly State Improvement		0.3%

- **STEP 2** – To determine the average state improvement, divide the sum of the yearly state improvement by the number of years of data minus one

$$\text{Average state improvement} = 0.3\% \div (5 - 1) = 0.075\%$$

- **STEP 3** – Find the district yearly improvement by subtracting the percent scoring in the bottom two levels (Step 1 and Progressing) for years 2, 3, 4, and 5 from the previous year of each. (Years in which the percent scoring in the bottom two levels increases will be reflected by a negative number.)

Year 1 District Improvement	Year 1 % in bottom two minus Year 2 % in bottom two	$54.7\% - 47.9\% = 6.8\%$
Year 2 District Improvement	Year 2 % in bottom two minus Year 3 % in bottom two	$47.9\% - 44.1\% = 3.8\%$
Year 3 District Improvement	Year 3 % in bottom two minus Year 4 % in bottom two	$44.1\% - 48.6\% = -4.5\%$
Year 4 District Improvement	Year 4 % in bottom two minus Year 5 % in bottom two	$48.6\% - 52.1\% = -3.5\%$
Sum of Yearly District Improvement		2.6%

- **STEP 4** – To determine the average district improvement, divide the sum of the yearly district improvement by the number of years of data minus one

$$\text{Average district improvement} = 2.6\% \div (5 - 1) = 0.65\%$$

- **STEP 5** – Compare the average state improvement to the average district improvement. If the average district improvement is equal to or greater than the average state improvement, the district is eligible to receive half-point values. In this example, the average district improvement (0.65%) is higher than the average state improvement (0.075%), so this district would be eligible to receive half-point values.

Footnote: Floors represent the minimal level of performance necessary to earn full scoring guide points for improvement. The floors were established at one standard deviation below the state average.

Subsection A.5: Bonus Point Calculation (Index Approach)

Districts that have 20 or more students in an ethnic/racial minority in at least two consecutive years in a grade tested may earn MAP bonus points if the improvement of the minority group is greater than or equal to the improvement of the majority group in more than half of the years of comparison. Following is an illustration of the bonus point calculation using the index approach. The index bonus point calculation is used only when a district earns scoring guide points in the same grade span using the index approach. Using the index bonus point calculation, districts can earn up to 4 points per grade span (1 bonus point possible for each of the 4 subject areas). In any given subject area for a grade tested, a district whose minority group shows progress equal to the majority can earn .5 points. In any given subject area for a grade tested, a district whose minority group shows progress greater than the majority can earn 1 point.

Example:

	Year 1	Year 2	Year 3	Year 4	Year 5
Majority Group Composite Score	165.2	158.9	167.4	168.0	171.7
Minority Group Composite Score	163.6	161.4	169.9	163.8	169.3

- **STEP 1** – Find the majority yearly improvement by subtracting the index scores of years 1, 2, 3, and 4 from the subsequent year of each. (Index score decreases are reflected by a negative number.)

Year 1 Majority Improvement	Year 2 Index Score minus Year 1 Index Score	$158.9 - 165.2 = -6.3$
Year 2 Majority Improvement	Year 3 Index Score minus Year 2 Index Score	$167.4 - 158.9 = 8.5$
Year 3 Majority Improvement	Year 4 Index Score minus Year 3 Index Score	$168.0 - 167.4 = 0.6$
Year 4 Majority Improvement	Year 5 Index Score minus Year 4 Index Score	$171.7 - 168.0 = 3.7$

- **STEP 2** – Find the minority yearly improvement by subtracting the index scores of years 1, 2, 3, and 4 from the subsequent year of each. (Index score decreases are reflected by a negative number.)

Year 1 Minority Improvement	Year 2 Index Score minus Year 1 Index Score	$161.4 - 163.6 = -2.2$
Year 2 Minority Improvement	Year 3 Index Score minus Year 2 Index Score	$169.9 - 161.4 = 8.5$
Year 3 Minority Improvement	Year 4 Index Score minus Year 3 Index Score	$163.8 - 169.9 = -6.1$
Year 4 Minority Improvement	Year 5 Index Score minus Year 4 Index Score	$169.3 - 163.8 = 5.5$

- **STEP 3** – Compare the yearly majority improvement to the yearly minority improvement. If the minority improvement is equal to or greater than the majority group in more than half of the comparisons, the district receives bonus points. This example shows a district with five years of consecutive assessment data for a minority group of 20 or more students. Five years of assessment data result in four years of measurable improvement for the minority group. In order to receive bonus points, this district needs minority improvement results equal to or greater than the majority group in three out of the four years of comparison. In this example, the minority group made greater improvement than the majority group in two of the comparisons, and made equal improvement in one of the comparisons (see the shaded areas below). This district receives .5 bonus points since the minority group made progress equal to the majority group. The minority progress is considered “equal” because one of the minority’s three years of improvement data required to meet the bonus point standard is equal to the majority improvement.

	Year 1	Year 2	Year 3	Year 4
Majority Improvement	- 6.3	8.5	.6	3.7
Minority Improvement	-2.2	8.5	-6.1	5.5

The following example provides further clarification of the bonus point calculation. All data are the same as above with the exception of the third year of minority improvement. In this example, the minority improvement is greater than the majority improvement in three years and equal to the majority improvement in one year. This district receives 1 bonus point because the minority group made progress greater than the majority group. The minority progress is considered “greater than” because more than half of the years of minority improvement used for comparison are greater than the majority improvement. The year in which the minority group made equal improvement in comparison to the majority group is not required to meet the bonus point standard.

	Year 1	Year 2	Year 3	Year 4
Majority Improvement	- 6.3	8.5	.6	3.7
Minority Improvement	-2.2	8.5	.8	5.5

For districts that have multiple minority groups, step 2 is performed for each group to determine the yearly improvement. The following chart illustrates how a district with multiple minority groups is evaluated. In this example, improvement data for the second minority group is only available for years 2-4. This results in seven total improvement comparisons for the minority groups combined. The second minority group showed less improvement than the majority group in all three years, so the combination of the minority groups’ improvement is equal to or greater than the majority improvement in only three of the seven comparisons. This district receives no bonus points.

	Year 1	Year 2	Year 3	Year 4
Majority Improvement	- 6.3	8.5	.6	3.7
Minority Group #1 Improvement	-2.2	8.5	-6.1	5.5
Minority Group #2 Improvement		6.7	.3	2.4

Subsection A.6: Bonus Point Calculation (Percentage Improvement Approach)

Districts that have 20 or more students in an ethnic/racial minority in at least two consecutive years in a grade tested may earn MAP bonus points if the improvement of the minority group is greater than or equal to the improvement of the majority group in more than half of the comparisons of the percent of students in the top two and the bottom two levels. Following is an illustration of the bonus point calculation using the percentage improvement approach. The percentage improvement bonus point calculation is used only when a district earns scoring guide points in the same grade span using the percentage improvement approach. Using the percentage improvement bonus point calculation, districts can earn up to 8 points per grade span (2 bonus points possible for each of the 4 subject areas). In any given subject area for a grade tested, a district whose minority group

shows progress equal to the majority can earn 1 point. In any given subject area for a grade tested, a district whose minority group shows progress greater than the majority can earn 2 points.

Example:

	Year 1	Year 2	Year 3	Year 4	Year 5
Majority Group % in top 2 levels	18.4%	22.1%	19.3%	22.8%	27.0%
Majority Group % in bottom 2 levels	31.9%	26.4%	25.8%	23.4%	16.5%
Minority Group % in top 2 levels	9.6%	13.9%	11.1%	12.0%	19.3%
Minority Group % in bottom 2 levels	42.5%	37.1%	39.2%	34.3%	27.0%

- **STEP 1** – Find the majority yearly improvement in the top two levels by subtracting the percent of students in the top two levels for years 1, 2, 3, and 4 from the % of students in the top two levels for each of the subsequent years.

Year 1 Majority Improvement in top 2 levels	Year 2 % in top 2 minus Year 1 % in top 2	$21.7\% - 18.4\% = 3.3\%$
Year 2 Majority Improvement in top 2 levels	Year 3 % in top 2 minus Year 2 % in top 2	$19.3\% - 22.1\% = -2.8\%$
Year 3 Majority Improvement in top 2 levels	Year 4 % in top 2 minus Year 3 % in top 2	$22.8\% - 19.3\% = 3.5\%$
Year 4 Majority Improvement in top 2 levels	Year 5 % in top 2 minus Year 4 % in top 2	$27\% - 22.8\% = 4.2\%$

- **STEP 2** - Find the majority yearly improvement in the bottom two levels by subtracting the percent of students in the bottom two levels for years 2, 3, 4, and 5 from the % of students in the bottom two levels for each of the previous years.

Year 1 Majority Improvement in bottom 2 levels	Year 1 % in bottom 2 minus Year 2 % in bottom 2	$31.9\% - 26.4\% = 5.5\%$
Year 2 Majority Improvement in bottom 2 levels	Year 2 % in bottom 2 minus Year 3 % in bottom 2	$26.4\% - 25.8\% = 0.6\%$
Year 3 Majority Improvement in bottom 2 levels	Year 3 % in bottom 2 minus Year 4 % in bottom 2	$25.8\% - 23.4\% = 2.4\%$
Year 4 Majority Improvement in bottom 2 levels	Year 4 % in bottom 2 minus Year 5 % in bottom 2	$23.4\% - 16.5\% = 6.9\%$

- **STEP 3** – Find the minority yearly improvement in the top two levels by subtracting the percent of students in the top two levels for years 1, 2, 3, and 4 from the % of students in the top two levels for each of the subsequent years.

Year 1 Minority Improvement in top 2 levels	Year 2 % in top 2 minus Year 1 % in top 2	$13.9\% - 9.6\% = 4.3\%$
Year 2 Minority Improvement in top 2 levels	Year 3 % in top 2 minus Year 2 % in top 2	$11.1\% - 13.9\% = -2.8\%$
Year 3 Minority Improvement in top 2 levels	Year 4 % in top 2 minus Year 3 % in top 2	$12\% - 11.1\% = 0.9\%$
Year 4 Minority Improvement in top 2 levels	Year 5 % in top 2 minus Year 4 % in top 2	$19.3\% - 12\% = 7.3\%$

- **STEP 4** - Find the minority yearly improvement in the bottom two levels by subtracting the percent of students in the bottom two levels for years 2, 3, 4, and 5 from the % of students in the bottom two levels for each of the previous years.

Year 1 Minority Improvement in bottom 2 levels	Year 1 % in bottom 2 minus Year 2 % in bottom 2	$42.5\% - 37.1\% = 5.4\%$
Year 2 Minority Improvement in bottom 2 levels	Year 2 % in bottom 2 minus Year 3 % in bottom 2	$36.8\% - 39.2\% = -2.4\%$
Year 3 Minority Improvement in bottom 2 levels	Year 3 % in bottom 2 minus Year 4 % in bottom 2	$39.2\% - 34.3\% = 4.9\%$
Year 4 Minority Improvement in bottom 2 levels	Year 4 % in bottom 2 minus Year 5 % in bottom 2	$34.3\% - 27\% = 7.3\%$

- **STEP 5** – Compare the yearly majority improvement to the yearly minority improvement. If the minority improvement is equal to or greater than the majority group in more than half of the comparisons, the district receives bonus points. This example shows a district with five years of consecutive assessment data for a minority group of 20 or more students. Five years of assessment data result in four years of measurable improvement for the minority group. In order to receive bonus points, this district needs minority improvement results equal to or greater than the majority group in five out of the eight comparisons. In this example, the minority group made greater improvement than the majority group in four of the comparisons, and made equal improvement in one of the comparisons (see the shaded areas below). This district receives 1 bonus point since the minority group made progress equal to the majority group. The minority progress is considered “equal” because one of the minority’s five comparisons required to meet the bonus point standard is equal to the majority improvement.

	Year 1	Year 2	Year 3	Year 4
Majority Improvement in top 2 levels	3.3%	-2.8%	3.5%	4.2%
Minority Improvement in top 2 levels	4.3%	-2.8%	0.9%	7.3%

	Year 1	Year 2	Year 3	Year 4
Majority Improvement in bottom 2 levels	5.5%	0.6%	2.4%	6.9%
Minority Improvement in bottom 2 levels	5.4%	-2.4%	4.9%	7.3%

The following example provides further clarification of the bonus point calculation. All data are the same as above with the exception of the third year of minority improvement in the top two levels. In this example, the minority improvement is greater than the majority improvement in five of the eight comparisons and equal to the majority improvement in one comparison. This district receives 2 bonus points because the minority group made progress greater than the majority group. The minority progress is considered “greater than” because more than half of the comparisons of minority improvement are greater than the majority improvement. The comparison in which the minority group’s improvement is equal to the majority group was not required to meet the bonus point standard.

	Year 1	Year 2	Year 3	Year 4
Majority Improvement in top 2 levels	3.3%	-2.8%	3.5%	4.2%
Minority Improvement in top 2 levels	4.3%	-2.8%	3.9%	7.3%

	Year 1	Year 2	Year 3	Year 4
Majority Improvement in bottom 2 levels	5.5%	0.6%	2.4%	6.9%
Minority Improvement in bottom 2 levels	5.4%	-2.4%	4.9%	7.3%

For districts that have multiple minority groups, steps 3 and 4 are performed for each group to determine the yearly improvement. The following chart illustrates how a district with multiple minority groups is evaluated. In this example, improvement data for the second minority group is only available for years 2-4. This results in 14 total improvement comparisons for the minority groups combined. The second minority group showed less improvement than the majority group in five of the six comparisons, so the combination of the minority groups' improvement is equal to or greater than the majority improvement in only seven of the 14 comparisons. This district receives no bonus points.

	Year 1	Year 2	Year 3	Year 4
Majority Improvement in top 2 levels	3.3%	-2.8%	3.5%	4.2%
Minority Group #1 Improvement in top 2 levels	4.3%	-2.8%	3.9%	7.3%
Minority Group #2 Improvement in top 2 levels		-2.4%	2.8%	1.6%

	Year 1	Year 2	Year 3	Year 4
Majority Improvement in bottom 2 levels	5.5%	0.6%	2.4%	6.9%
Minority Group #1 Improvement in bottom 2 levels	5.4%	-2.4%	4.9%	7.3%
Minority Group #2 Improvement in bottom 2 levels		-4.9%	2.2%	3.8%

Section B: Standard 9.2

Reading Index Calculation

The index is a single composite number that represents the performance of every student in all three reading levels of the MAP (Unsatisfactory, Satisfactory, and Proficient). The percent of students scoring at each of these achievement levels is multiplied by the following values: Proficient by 3, Satisfactory by 2, and Unsatisfactory by 1. The sum of these products is the index, which measures improvement from one year to the next. The scoring guide defines the required index point improvement from one year to the next.

The following example shows how the index is calculated for a single grade.

- **STEP 1** – The percent of students in each performance level is determined for each year.

Level	Index Point Value	Year 1	Year 2	Year 3	Year 4	Year 5
Unsatisfactory	1	39.3%	35.1%	38.9%	23.3%	21.0%
Satisfactory	2	32.7%	35.6%	32.3%	36.2%	37.6%
Proficient	3	28.0%	29.3%	28.8%	40.5%	41.4%

- **STEP 2** – The percentage of students in each performance level is multiplied by the index point value for each year.

Year 1	Year 2	Year 3	Year 4	Year 5
39.3 x 1 = 39.3	35.1 x 1 = 35.1	38.9 x 1 = 38.9	23.3 x 1 = 23.3	21 x 1 = 21.0
32.7 x 2 = 65.4	35.6 x 2 = 71.2	32.3 x 2 = 64.6	36.2 x 2 = 72.4	37.6 x 2 = 75.2
28 x 3 = 84.0	29.3 x 3 = 87.9	28.8 x 3 = 86.4	40.5 x 3 = 121.5	42 x 3 = 126.0
188.7 Index Points	194.2 Index Points	189.9 Index Points	217.2 Index Points	222.2 Index Points

- **STEP 3** - For each grade, a grid is created and scoring guidelines applied to the index scores in the grid. An example appears below:

9.2 Reading Performance Index	Year 1	Year 2	Year 3	Year 4	Year 5
Grade 3 Reading	188.7	194.2	189.9	217.2	222.2

Section C: Standard 9.3

ACT Calculation

Sources of data used in calculation:

- June Cycle of Core Data, Screen 13
- ACT File

NOTES:

- Only scale score data as reported by ACT will be used in these calculations.
- When students take the ACT multiple times, the highest test score is used to determine the number of graduates scoring at or above the national average.

Example of supporting data format for APR:

	9.3 ACT	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
From Screen 13 →	Number of Graduates	148	153	155	170	152
From ACT file →	Number of Graduates Scoring at or Above the National Average	27	39	43	39	38
	Percent of Graduates Scoring at or Above the National Average	18.2	25.5	27.7	22.9	25.0

Method for calculating supporting data:

The percent of graduates scoring at or above the national average is determined by dividing the number of graduates scoring at or above the national average by the number of graduates, then multiplying by 100.

EXPLANATION OF DATA	EXAMPLES OF DATA (using Yr 1 figures)	EXAMPLES OF CALCULATIONS
1) The number of graduates is reported on Screen 13.	number of graduates = 148	
2) The number of graduates scoring at or above the national average is provided by ACT.	number of graduates scoring at or above the national average = 27	
3) The percent of graduates scoring at or above the national average is determined by dividing the number of graduates scoring at or above the national average by the number of graduates , then multiplying by 100.	a) number of graduates = 148 b) number of graduates scoring at or above the national average = 27	% of graduates scoring at or above the national average = $27 \div 148 = .182$ $.182 \times 100 = 18.2\%$

For more information on the ACT or to obtain the national average, visit the ACT website at www.act.org.

Section D: Standard 9.4

Subsection D.1: Advanced Courses Calculation (9.4.1)

Sources of data used in calculation:

- October Cycle of Core Data, Screens 16, 20, and 22
- August Cycle of Core Data, Screen 10

NOTE: In addition to the advanced courses provided within the resident district, advanced courses provided off site are automatically included in the calculation for 9.4.1 if the district submits the required data (including course numbers) on Core Data Screen 22. Screen 22 data must be reported for each area institution that provides advanced courses (i.e., other districts, community colleges, four-year colleges and universities, and Internet/electronic instructional providers). Only those specific courses with course codes and grade levels matching those on the approved advanced course list and dual credit courses (excluding vocational dual-credit classes) count in the advanced course calculation.

Example of supporting data format for APR:

9.4.*1 Advanced Courses		Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
From Screens 20 and 22	Units of Credit Times Enrollment in Approved Advanced Courses	137	155	160	162	148
From Screens 16 and 10	Grades 11-12 Enrollment Times Credit Possible	372	401	393	405	378
	Percent of Credits Earned in Advanced Courses	36.8	38.7	40.7	40.0	39.2

Method for calculating supporting data:

The percent of credits earned in advanced courses is determined by dividing the units of credit times enrollment in approved advanced courses by grades 11-12 enrollment times credit possible, then multiplying by 100. The following explains the step-by-step process and provides an example of how the calculations are performed.

EXPLANATION OF CALCULATIONS	EXAMPLES OF DATA (using Year 1 figures from above)			EXAMPLES OF CALCULATIONS
1) Units of credit times enrollment in approved advanced courses is determined by using the courses reported on Screen 20 that match the advanced course criteria (i.e. course number, sequence, and grade level -- see below for a list of advanced courses) and non-vocational dual-credit courses reported on Screen 22. The credit value of each course is multiplied by the course enrollment, then these products are summed.	ADVANCED			
	<u>Course #</u>	<u>Credit</u>	<u>Enroll</u>	<u>Adv. Course Units Earned</u>
	054810	1	18	1 X 18 = 18
	056500	1	16	1 X 16 = 16
	062000	.5	20	.5 X 20 = 10
	066300	1	17	1 X 17 = 17
	115860	1	19	1 X 19 = 19
	991105	2	21	+ 2 X 21 = 42
				122

	DUAL CREDIT (excluding vocational)	<u>Dual Credit Units Earned</u>
	<u>Course #</u> <u>Credit</u> <u>Enroll</u> 115861 1 15	1 X 15 = 15 122 + 15 = 137 Total Units Earned
2) Grades 11-12 enrollment times credits possible is determined by using the sum of the enrollment in grades 11 and 12 (using September count), which is reported on Screen 16. This total enrollment number is multiplied by the total number of periods per day, as reported on Screen 10. If the reported periods per day are less than 6, this indicates block scheduling. In this case, the enrollment is multiplied by total periods per day times 2.	September enrollment for grades 11 and 12 = 62 Periods per day = 6	62 X 6 = 372
3) The percent of credits earned in advanced courses is determined by dividing units of credit times enrollment in advanced courses by grades 11-12 enrollment times credits possible , then multiplying by 100.	a) units of credit times enrollment in advanced courses = 137 b) grades 11-12 enrollment times credits possible = 372	% of credits earned in advanced courses = 137 ÷ 372 = .368 .368 X 100 = 36.8%

List of Advanced Courses

The following courses/course codes have been designated “Advanced Courses.” These courses are considered advanced because they are over and above the courses required for graduation. It is assumed that the content of the courses, in general, is at a level suitable for juniors and seniors who are preparing for postsecondary education or training

Course Code	Course Name	Description
054800	Language Arts	Grade 11 or 12 and sequence 3 or greater
054804-5	Comp/Creative Writing	Grade 11 or 12
054806	Applied Comm.	Grade 11 or 12 and sequence 3 or greater
054810	Journalism	Grade 11 or 12 and sequence 2 or greater
054817	Folklore	Grade 11 or 12
054819-28	Literature, Various	Grade 11 or 12
054845	Shakespeare	Grade 11 or 12
054850	Mythology	Grade 11 or 12
054860	Word Study (Semantics)	Grade 11 or 12
054861	C. Prep English	Grade 11 or 12
054863	Satire-Humor	Grade 11 or 12
054864	Ethnic Literature	Grade 11 or 12
056500	Speech	Grade 11 or 12 and sequence 2 or greater
056510	Debate	Grade 11 or 12
062000	American Sign Language	Grade 11 or 12
064900	French	sequence 2 or greater
065100	German	sequence 2 or greater

065700	Latin	sequence 2 or greater
066200	Russian	sequence 2 or greater
066300	Spanish	sequence 2 or greater
067100	Hebrew	sequence 2 or greater
068000	Japanese	sequence 2 or greater
069010	Chinese	sequence 2 or greater
069020	Italian	sequence 2 or greater
115800	Mathematics (Integrated)	Grade 11 or 12 and sequence 3 or greater
115810	Algebra	sequence 2 or greater
115825	Applied Math	Grade 11 or 12 and sequence 3 or greater
115830	Geometry	
115840	Math Analysis	Grade 11 or 12
115860	Trigonometry	Grade 11 or 12
115861	Alg-Trigonometry	Grade 11 or 12
115865	Analytical Geometry	Grade 11 or 12
115866	Calculus	Grade 11 or 12
115875	Prob-Statistics	Grade 11 or 12
133810	Astronomy	Grade 11 or 12
133820	Geology	Grade 11 or 12
134200	Biology	Grade 11 or 12 and sequence 2 or greater
134210	Botany	Grade 11 or 12
134220	Zoology	Grade 11 or 12
134221	Phys-Anatomy	Grade 11 or 12
134600	Chemistry	Grade 11 or 12
134642	Applied Science	Grade 11 or 12 and sequence 3 or greater
135000	Science (Integrated)	Grade 11 or 12 and sequence 3 or greater
135900	Physics	Grade 11 or 12
135910	Prin-Technology	Grade 11 or 12
156100	Psychology	Grade 11 or 12
156620	Contemporary Issues	Grade 11 or 12
156630	Economics	Grade 11 or 12
156640	Geography	Grade 11 or 12 and sequence 2 or greater
156651	American Government	Grade 11 or 12 and sequence 2 or greater
156652	International Relations	Grade 11 or 12
156653	Comparative Government	Grade 11 or 12
156661	American History	Grade 11 or 12 and sequence 2 or greater
156663	World History	Grade 11 or 12 and sequence 2 or greater
156664-67	History, Various	Grade 11 or 12
156670	Sociology	Grade 11 or 12
156680	Anthropology	Grade 11 or 12
156683	Afro-American History	Grade 11 or 12
156685	Minority Groups	Grade 11 or 12
156691	Civil War Period	Grade 11 or 12
156692	American Heritage	Grade 11 or 12
156693	History of West	Grade 11 or 12
991105	Computer Science	Grade 11 or 12

Subsection D.2: Vocational Courses Calculation (9.4.2)

Sources of data used in calculation:

- October Cycle of Core Data, Screens 16, 20, and 22
- August Cycle of Core Data, Screen 10
- State-Approved Career Education Course List

NOTE: Career education courses reported on Screens 20 and 22 are compared with a list of the district's state approved career education courses. Only those career education courses verified by the Division of Career Education as state approved are counted for MSIP purposes. Dual-credit career education classes are included in this standard.

Example of supporting data format for APR:

9.4.*1 Vocational Courses		Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
From Screens 20 and 22	Units of Credit Times Enrollment in Approved Career Educ. Courses	89.5	102	94	112	92.5
From Screens 16 and 10	Grades 11-12 Enrollment Times Credit Possible	372	401	393	405	378
	Percent of Credits Earned in Career Educ. Courses	24.1	25.4	23.9	27.7	24.5

Method for calculating supporting data:

The percent of credits earned in vocational courses is determined by dividing the units of credit times enrollment in approved career education courses by grades 11-12 enrollment times credit possible, then multiplying by 100. The following explains the step-by-step process and provides an example of how the calculations are performed.

EXPLANATION OF CALCULATIONS	EXAMPLES OF DATA (using Year 1 figures from above)	EXAMPLES OF CALCULATIONS
1) The units of credit times enrollment in approved career education courses is determined by using data reported on Screen 20 to identify state-approved career education courses, indicated by a program code “01” (see next page for exceptions). Data from Screen 22 are used to identify career education courses offered off-site (i.e., at an area career education school or college). The credit value of each course is multiplied by the course enrollment, then the products are summed.	CAREER ED. (on-site)	<u>Car. Ed. Units Earned On-site</u> 1.5 X 17 = 25.5 1 X 13 = 13 <u>+ 2 X 18 = 36</u> 74.5 <u>Car. Ed. Units Earned Off-site</u> 1 X 15 = 15 74.5 + 15 = 89.5 Total Units Earned
	<u>Course #</u> <u>Credit</u> <u>Enroll</u> 034354 1.5 17 034380 1 13 040080 2 18	
	CAREER ED. (off-site)	
	<u>Course #</u> <u>Credit</u> <u>Enroll</u> 016720 1 15	
2) Grades 11-12 enrollment times credits possible is determined by using the sum of the enrollment in grades 11 and 12 (using September count), which is reported on	September enrollment for grades 11 and 12 = 62 Periods per day = 6	 62 X 6 = 372

Screen 16. This total is multiplied by the total number of periods per day, as reported on Screen 10. If the reported periods per day are less than 6, this indicates block scheduling. In this case, the enrollment is multiplied by total periods per day times 2.		
3) To determine percent of credits earned in career education courses , the units of credit times enrollment in career education courses are divided by grades 11-12 enrollment times credits possible , then multiplied by 100.	a) units of credit times enrollment in vocational courses = 89.5 b) grades 11-12 enrollment times credits possible = 372	% of credits earned in career education courses = $89.5 \div 372 = .241$ $.241 \times 100 = 24.1\%$

Career Education Courses Exceptions

All state-approved career education courses are used in the evaluation of MSIP Performance Standard 9.4.2 **except for the following:**

Course Code	Course Name
016700	Exploring Agriculture
016710	Agricultural Science 1
016760	Agricultural Science 2
096800	Exploratory Family and Consumer Sciences

Note: Please contact the Division of Career Education (573/751-2660) if you have questions regarding the approval of a vocational program.

Subsection D.3: Advanced and Vocational Courses Calculation (9.4.1 and 9.4.2)

Note: This calculation is used to determine if a district meets 9.4.1 and 9.4.2 using the “combined” method.

Sources of data used in calculation:

- October Cycle of Core Data, Screens 16, 20, and 22
- August Cycle of Core Data, Screen 10
- State-Approved Career Education Course List

Example of supporting data format for APR:

	9.4.*1 Advanced Courses & 9.4.*2 Vocational Courses	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
From Screens 20 and 22 →	Units of Credit Times Enrollment in Approved Advanced and Career Education Courses	226.5	247	258	266	237.5
From Screens 16 and 10 →	Grades 11-12 Enrollment Times Credits Possible	372	401	393	405	378
	Percent of Credits Earned in Advanced and Career Ed. Courses	60.9	61.6	65.6	65.7	62.8

Method for calculating supporting data:

The percent of credits earned in advanced and career education courses combined is determined by dividing the units of credit times enrollment in approved advanced and career education courses by grades 11-12 enrollment times credit possible, then multiplying by 100. The following explains the step-by-step process and provides an example of how the calculations are performed.

EXPLANATION OF CALCULATIONS	EXAMPLES OF DATA (using Yr 1 figures from above)	EXAMPLES OF CALCULATIONS
1) Units of credit times enrollment in approved advanced and vocational courses is calculated by adding the units of credit times enrollment in approved advanced courses to the units of credit times enrollment in approved career education courses. (For further explanation, see Subsections D1 and D2.)	a) Units of credit times enrollment in approved advanced courses = 137 b) Units of credit times enrollment in approved career education courses = 89.5	$137 + 89.5 = 226.5$
2) Grades 11-12 enrollment times credits possible is determined by using the sum of the enrollment in grades 11 and 12 (using September count), which is reported on Screen 16. This total enrollment number is multiplied by the total number of periods per day, as reported on Screen 10. If the reported periods per day are less than 6, this indicates block scheduling. In this case, the enrollment is multiplied by total periods per day times 2.	September enrollment for grades 11 and 12 = 62 Periods per day = 6	$62 \times 6 = 372$
3) The percent of credits earned in advanced and career education courses is determined by dividing units of credit times enrollment in approved advanced and career education courses by grades 11-12 enrollment times credits possible , then multiplying by 100.	a) units of credit times enrollment in advanced courses = 226.5 b) grades 11-12 enrollment times credits possible = 372	% of credits earned in advanced courses = $226.5 \div 372 = .609$ $.609 \times 100 = 60.9\%$

Subsection D.4: College Placement Calculation (9.4.3)

Sources of data used in calculation:

- February Cycle of Core Data, Screen 8
- June Cycle of Core Data, Screen 13

Example of supporting data format for APR:

9.4.*3 College Placement		Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
From Screen 8	Number of Graduates Entering College	69	72	79	83	93
From Screen 13 (previous year)	Number of Graduates	126	133	128	141	143
	Percent of Graduates Entering College	54.8	54.1	61.7	58.9	65.0

Method for calculating supporting data:

The percent of graduates entering college is determined by dividing the number of graduates entering college by the number of graduates, then multiplying by 100.

EXPLANATION OF CALCULATIONS	EXAMPLES OF DATA (using Year 1 figures from above)		EXAMPLES OF CALCULATIONS
1) The number of graduates entering college is determined by using the sum of the previous year's graduates who entered 4-year college, 2-year college, or non-college credit postsecondary school (i.e., technical school), as reported on Screen 8.		Totals	43+16+10 = 69
	4-year college	43	
	2-year college	16	
	non-college	10	
2) The number of graduates is reported on Screen 13 from the previous year of Core Data.	graduates = 126		
3) The percent of graduates entering college is determined by dividing the number of graduates entering college by the number of graduates , then multiplying by 100.	a) number of graduates entering college = 69		% of graduates entering college =
	b) number of graduates = 126		69 ÷ 126 = .548
			.548 X 100 = 54.8%

Subsection D.5: Vocational Placement Calculation (9.4.4)

Sources of data used in calculation:

- February Cycle of Core Data, Screens 26 and 27

Example of supporting data format for APR:

9.4.*4 Vocational Placement		Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
From Screens 26 and 27	Number of Graduates Completing a Vocational Education Program	41	36	38	42	44
From Screens 26 and 27	Number of Graduates Completing a Vocational Education Program Placed in Occupations Relating to their Training, Attending College, or in the Military	33	24	27	32	33
	Percent of Vocational Completers who are Placed	80.5	66.7	71.1	76.2	75.0

Method for calculating supporting data:

The percent of vocational completers who are placed is determined by dividing the number of graduates completing a career education program placed in occupations relating to their training, attending college, or in the military by the number of graduates completing a career education program, then multiplying by 100.

EXPLANATION OF CALCULATIONS	EXAMPLES OF DATA (using Year 1 figures from above)	EXAMPLES OF CALCULATIONS
1) The number of graduates completing a vocational education program is determined by adding the number of graduates reported on Screens 26 (for students reported by the comprehensive high school) and 27 (for students reported by the AVTS) in each of the following categories: EMP REL, EMP N-R, CED REL, CED N-R, NOT EMP, NAV PLC, STS UNK, MIL REL, and MIL N-R.	SCREEN 26	SCREEN 26 = 5+3+0+6+0+1+1+2+4 = 22
	Emp Rel = 5 Emp N-R = 3 Ced Rel = 0 Ced N-R = 6 Not Emp = 0 Nav Plc = 1 Sts Unk = 1 Mil Rel = 2 Mil N-R = 4	
	SCREEN 27	SCREEN 27 = 7+2+2+3+1+0+0+3+1= 19
	Emp Rel = 7 Emp N-R = 2 Ced Rel = 2 Ced N-R = 3 Not Emp = 1 Nav Plc = 0 Sts Unk = 0 Mil Rel = 3 Mil N-R = 1	TOTAL = 22+19=41
2) The number of graduates completing a vocational education program placed in occupations relating to their training, attending college, or in the military is determined by adding the number of graduates reported on Screens 26 and 27 in the following categories: EMP REL, CED REL, CED N-R, MIL REL, MIL N-R.	SCREEN 26	SCREEN 26 = 5+0+6+2+4 = 17
	Emp Rel = 5 Ced Rel = 0 Ced N-R = 6 Mil Rel = 2 Mil N-R = 4	
	SCREEN 27	SCREEN 27 = 7+2+3+3+1 = 16
	Emp Rel = 7 Ced Rel = 2 Ced N-R = 3 Mil Rel = 3 Mil N-R = 1	TOTAL = 17+16 = 33

3) The percent of vocational completers who are placed is determined by dividing the number of graduates completing a vocational education program placed in occupations relating to their training, attending college, or in the military by the number of graduates completing a vocational education program , then multiplying by 100.	a) number of graduates completing a vocational education program = 41 b) number of graduates completing a vocational education program placed in occupations relating to their training, attending college, or in the military =33	percent of vocational completers who are placed = $33 \div 41 = .805$ $.805 \times 100 = 80.5\%$
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Vocational Placement/Follow-Up Guidelines

Follow-up data is reported on the previous year's graduates based on the status of the graduates 180 days following their exit from vocational training. ***Each graduate should be reported in only one vocational education program area.*** Districts should collect follow-up information on any student who graduated high school and received credit in at least one state-approved career education course (excluding Exploring Agriculture, Industrial Technology, and any FACS course) during grades 9-12. However, if students completed state-approved career courses at the comprehensive high school and the area career education school, their follow-up data should not be reported for both locations. Generally, the area vocational school is responsible for completing the follow-up data on screen 27 and providing the sending school with a copy.

If the graduate is employed and continuing education, use the following guidelines:

- ◆ A graduate attending school (full- or part-time) and employed (full or part-time) in a field for which they were trained, should be reported as “employed related” (EMP REL).
- ◆ A graduate attending school (full- or part-time) in a field for which they were trained, but not employed in a field for which they were trained should be reported as “continuing education related” (CED REL).
- ◆ A graduate attending school (full- or part-time) in a field for which they were not trained, but employed (full or part-time) in a field for which they were trained should be reported as “employed related” (EMP REL).

Subsection D.6: College and Vocational Placement Calculation (9.4.3 and 9.4.4 Combined)

Note: This calculation is used to determine if a district meets 9.4.3 and 9.4.4 using the “combined” method.

Sources of data used in calculation:

- February Cycle of Core Data, Screens 8, 26, and 27
- June Cycle of Core Data, Screen 13

Example of supporting data format for APR:

	9.4.*3 College Placement & 9.4.*4 Vocational Placement	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
From Screens 8, 26, and 27	Number of Graduates Entering College or Placed in an Occupation Related to their Vocational Training or the Military	91	88	82	97	103
From Screen 13 (previous year)	Number of Graduates	126	133	128	141	143
	Percent of College and Vocational Placement	72.2	66.2	64.1	68.8	72.0

Method for calculating supporting data:

The percent of graduates entering college or in vocational placement is determined by dividing the number of graduates entering college or placed in an occupation related to their vocational training or the military by the number of graduates, then multiplying by 100.

EXPLANATION OF CALCULATIONS	EXAMPLES OF DATA (using Year 1 figures from above)	EXAMPLES OF CALCULATIONS
1) The number of graduates entering college or placed in an occupation related to their vocational training or the military is determined by using the sum of the previous year’s graduates reported on Screen 8 who entered 4-year college, 2-year college, or non-college credit postsecondary school (i.e., technical school) and adding this to the number of the previous year’s graduates reported in one of the following categories on Screens 26 and 27: EMP REL, MIL REL, and MIL NR.	SCREEN 8	SCREEN 8
	4-year college = 43 2-year college = 16 non-college = 10	43+16+10 = 69
	SCREEN 26	SCREEN 26
	Emp Rel = 5 Mil Rel = 2 Mil N-R = 4	5+2+4 = 11
	SCREEN 27	SCREEN 27
2) The number of graduates is reported on Screen 13 from the previous year’s Core Data.	graduates = 126	7+3+1 = 11
		TOTAL
		69+11+11 = 91
3) The percent of college and vocational placement is determined by dividing the number of graduates entering college or placed in an occupation related to their vocational training or the military by the number of graduates , then multiplying by 100.	a) number of graduates entering college or placed in an occupation related to their vocational training or the military = 91 b) number of graduates = 126	% of graduates entering college = 91 ÷ 126 = .722 .722 X 100 = 72.2%

Section E: Standard 10.1

Subsection E.1: Dropout Calculation (10.1.1)

Sources of data used in calculation:

- June Cycle of Core Data, Screen 13
- October Cycle of Core Data, Screen 16

NOTES:

- Dropouts reported as the result of an expulsion due to a violent act according to Section 160.261 and 167.171, RSMo, will be excluded from the total number of dropouts used for MSIP purposes. The number of 9-12 grade students reported as expelled on Screen 9 of Core Data will be subtracted from the total number of 9-12 dropouts reported on Screen 13 of Core Data.
- In the year of a district's MSIP review, two points are deducted from 10.1.1 if the district does not consistently report students who drop out of school to the Missouri Literacy Hotline, as required by Standard 8.3.5.
- In the year of a district's MSIP review, one bonus point is added for each of the past five years in which at least 5% of the district's five-year average number of seniors earned a GED within 5 years of dropping out of school (see explanation and example on next page).

Example of supporting data format for APR:

	10.1*1 Dropout Rates	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
From Screens 13 and 16	Number of Students in Grades 9-12 (average)	198	210	222	213	204
From Screen 13	Number of Students Dropping Out	6	7	11	8	5
	Percent of Students Dropping Out of School	3.0	3.3	5.0	3.8	2.5

Method for calculating supporting data:

The percent of students dropping out of school is determined by dividing the number of students dropping out by the number of students in grades 9-12 (average), then multiplying by 100.

EXPLANATION OF CALCULATIONS	EXAMPLES OF DATA (using Year 1 figures from above)	EXAMPLES OF CALCULATIONS
1) The number of students in grades 9-12 (average) is determined by using the September enrollment reported on Screen 16 for grades 9-12 and multiplying by 2. Next, using data from Screen 13, the reported transfers in are added, and the reported transfers out and dropouts are subtracted. Finally, this total is divided by 2.	Sept. enrollment for grades 9-12 = 200 Transfers in = 9 Transfers out = 7 Dropouts = 6	$200 \times 2 = 400$ $\frac{400 + 9 - (7 + 6)}{2} = 198$
2) The number of students dropping out of school is reported on Screen 13.	Dropouts = 6	

3) The percent of students dropping out of school is determined by dividing the number of students dropping out of school by the number of students in grades 9-12 (average) , then multiplying by 100.	a) number of students dropping out of school = 6 b) number of students in grades 9-12 (average) = 198	percent of students dropping out of school = $6 \div 198 = .03$ $.03 \times 100 = 3\%$
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Bonus Points Calculation

In the year of a district's MSIP review, one bonus point is added for each of the past five years in which at least 5% of the district's five-year average number of seniors earned a GED within 5 years of dropping out of school. The following step-by-step example illustrates how the bonus points are calculated.

Example:

# of seniors (as reported in the September count on Core Data screen 16)	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
	38	45	42	46	39
# of GED completers (only those who complete the GED within five years of their drop-out date are counted in the bonus points calculation)	0	1	3	2	1

STEP 1 – Average the number of seniors from the past five years.

$$\frac{38+45+42+46+39}{5} = 42$$

- **STEP 2** – Multiply the five-year average by .05 (rounding to the nearest whole number). This product is 5% of the average number of seniors.

$$.05 \times 42 = 2$$

- **STEP 3** – Compare the product of the calculation in step 2 to the annual number of drop-outs who completed a GED within five years of their drop-out date. The district earns a point for each year in which the number of GED completers equals or exceeds 5% of the average number of seniors.

In this example, 5% of the average number of seniors is two. The district earns a total of two points – one point for Year 3 and one point for Year 4 – because the number of GED completers equals or exceeds two in these years.

Subsection E.2: Attendance Calculation (10.1.2)

Sources of data used in calculation:

- June Cycle of Core Data, Screens 10 and 14
- February Cycle of Core Data, Screen 16

Example of supporting data format for APR:

10.1*2 Average Daily Attendance	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
Grades K-8	94.3	94.2	94.3	94.4	94.6
Grades 9-12	90.8	91.8	90.5	91.1	92.4
Grades K-12	93.1	93.5	93.1	93.4	93.9

Method for calculating supporting data:

If five years of hours-of-absence data are available for all grade levels, the average daily attendance for each grade span is determined by using the **“hours of absence”** method. This method is calculated by dividing the hours of attendance by the hours possible, then multiplying by 100.

If five years of hours-of-absence data are not available at all grade levels, the **“January membership”** method is used. This method is calculated by dividing the average daily attendance by the reported January membership count, then multiplying by 100.

HOURS OF ABSENCE METHOD		
EXPLANATION OF CALCULATIONS	EXAMPLES OF DATA (using Year 1 figures from above)	EXAMPLES OF CALCULATIONS
1) The hours of attendance is determined by adding the Full-time, Part-time, Deseg In, and Fed Lands attendance hours reported on Screen 14.	ATTENDANCE HOURS	163,298+40,113+0+0 = 203,411
	Full-time: 163,298 Part-time: 40,113 Deseg in: 0 Fed lands: 0	
2) The hours possible is determined by adding attendance hours and hours of absence. Hours of absence are reported on Screen 14 and include the totals for Resident I, Deseg In, and Fed Lands.	Resident I hours of absence = 15061 Deseg In hours of absence = 0 Fed Lands hours of absence = 0	a) hours of absence = 15,061+0+0 = 15,061 b) attendance hours = 203,411 c) hours possible = 15,061+203,411 = 218,472
3) The attendance rate using the “hours of absence” method is determined by dividing the hours of attendance by the hours possible , then multiplying by 100.	a) hours of attendance = 203,411 b) hours possible = 218,472	Average daily attendance using the hours of absence method = $203,411 \div 218,472 = .931$ $.931 \times 100 = 93.1\%$

Example of supporting data format for APR:

10.1*2 Average Daily Attendance	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
Grades K-8	94.3	94.2	94.3	94.4	94.6
Grades 9-12	90.8	91.8	90.5	91.1	92.4
Grades K-12	93.2	93.5	93.1	93.4	93.9

JANUARY MEMBERSHIP METHOD		
EXPLANATION OF CALCULATIONS	EXAMPLES OF DATA (using Year 1 figures from above)	EXAMPLES OF CALCULATIONS
1) The average daily attendance is determined by adding the Full-time, Part-time, Deseg In, and Fed Lands attendance hours reported on Screen 14 and dividing this sum by the hours in session reported on Screen 10.	ATTENDANCE HOURS	$163,298 + 40,113 + 0 + 0 = 203,411$ $203,411 \div 1,084.65 = 187.54$
	Full-time: 163,298 Part-time: 40,113 Deseg in: 0 Fed lands: 0 Hours in session: 1084.65	
2) The January membership is determined by adding the number of students reported as Full-time, Part-time, Deseg In, or Fed Lands for the January membership on Screen 16.	Full-time: 161 Part-time: 40.2 Deseg in: 0 Fed land: 0	January membership = $161 + 40.2 + 0 + 0 = 201.2$
3) The average daily attendance using the January membership method is determined by dividing the average daily attendance by the January membership , then multiplying by 100.	a) average daily attendance = 187.54 b) January membership = 201.2	average daily attendance using the January membership method $187.54 \div 201.2 = .932$ $.932 \times 100 = 93.2\%$

Section F: Standard 11.1

Post-Elementary School GPA Calculation (K-8 Districts Only)

Sources of data used in calculation:

- June Cycle of Core Data, Screen 14B

Example of supporting data format for APR:

From Screen 14B	11.1 Grade Point Average	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
	GPA of Grades 9 and 10 Elementary Students	2.405	2.557	2.613	2.79	2.734
	GPA of Grades 9 and 10 Receiving High School Students	2.75	2.912	2.881	2.889	2.725

Method for calculating supporting data:

The GPA of grades 9 and 10 elementary students is determined by finding the average GPA (using a 4-point scale) of resident II (tuition) students who graduated from a K-8 district and are in either grade 9 or 10 at the receiving school.

The GPA of grades 9 and 10 receiving high school students is determined by finding the average GPA (using a 4-point scale) for students in grades 9 and 10 who are not resident II students.

EXPLANATION OF CALCULATIONS	EXAMPLES OF DATA (using Year 1 figures from above)	EXAMPLES OF CALCULATIONS				
The GPA of grades 9 and 10 elementary students is calculated using the GPA (rounded to the nearest thousandth) reported on Screen 14B for ninth- and tenth-grade resident II students who graduated from a K-8 district. If GPAs are reported on an 11-point scale, they must be converted to a 4-point scale before performing the calculations. The formula for this conversion is $(\text{GPA} + 1) \div 3$. To determine the overall average of the K-8 graduate GPAs, first the GPA for grade 9 is multiplied by the number of students in grade 9. Next, the GPA for grade 10 is multiplied by the number of students in grade 10. These steps are repeated for all districts attended by the K-8 graduates. The products are then summed and divided by the total number of K-8 graduates in grades 9 and 10.	K-8 graduates	11-pt	Calculation	4-pt		
	GRADE 9		7.34	$(7.34+1) \div 3$	2.78	
	District	GPA	Students	4.513	$(4.513+1) \div 3$	1.838
	Dist.#1	7.34	5	6.428	$(6.428+1) \div 3$	2.476
	Dist.#2	4.513	2	4.895	$(4.895+1) \div 3$	1.965
	GRADE 10		Calculated GPA			
	District	GPA	Students	2.78 X 5 = 13.9		
	Dist.#1	6.428	2	1.838 X 2 = 3.676		
	Dist.#2	4.895	2	2.476 X 2 = 4.952		
			1.965 X 2 = 3.93			
			Total = 26.458			
			Total # K-8 graduates			
			5+2+2+2 = 11			
			Final Calculated GPA			
			26.458 ÷ 11 = 2.405			

<p>The GPA of grades 9 and 10 elementary students is calculated using the GPA (rounded to the nearest thousandth) reported on Screen 14B for ninth- and tenth-grade receiving-district students (GPAs reported on an 11-point scale are converted to a 4-point scale). To determine the overall average of the receiving-district student GPAs, first the GPA for grade 9 is multiplied by the number of students in grade 9. Next, the GPA for grade 10 is multiplied by the number of students in grade 10. These steps are repeated for all receiving districts. The products are then summed and divided by the total number of receiving-district students in grades 9 and 10.</p>	Receiving District Students			11-pt	Calculation	4-pt
	GRADE 9			7.574	$(7.574+1) \div 3$	2.858
	<u>District</u>	<u>GPA</u>	<u>Students</u>	6.158	$(6.158+1) \div 3$	2.386
	Dist.#1	7.574	615	7.667	$(7.667+1) \div 3$	2.889
	Dist.#2	6.158	263	6.475	$(6.475+1) \div 3$	2.492
	GRADE 10			Calculated GPA		
	<u>District</u>	<u>GPA</u>	<u>Students</u>	2.858 X 615 = 1757.67		
	Dist.#1	7.667	589	2.386 X 263 = 627.518		
	Dist.#2	6.475	206	2.889 X 589 = 1701.621		
				2.492 X 206 = 513.352		
				Total = 4600.161		
				Total # Receiving Dist. Students		
				615+263+589+206 = 1673		
				Final Calculated GPA		
				$4600.161 \div 1673 = 2.75$		